## **EUROPA Docs**

- 1. 1. <u>Background Concepts</u>
  - 2. <u>User Docs</u>
  - 3. Modeling tricks

This page provides in-depth documentation on understanding and using EUROPA. If you don't know where to start, or just want a quick overview of how to use EUROPA, take a look at the <u>EUROPA Quick Start</u>

## **Background Concepts**

- Overview: The EUROPA 2 Planning Approach
- Constraint Satisfaction Problems
- Simple Temporal Problems (Networks)
- Plan Representation
- Dynamic Objects
- Partial Plans
- Problem Solving

## **User Docs**

- How to embed EUROPA in an application
- NDDL Reference
- Complete NDDL Grammar (for ANTLR)
- Constraint Library Reference
- Configuration
  - ♦ Logging
  - ♦ Built-in Solver
- Visualization / Debugging Tools
  - ◆ PSUI
  - ♦ PlanWorks
    - ♦ PlanWorks user's guide
    - ♦ PlanWorks.cfg Reference
  - ♦ Low-level debugging:
    - ♦ Stepping and Writing
    - ♦ Debug Output Management
    - **◊** Timelines
    - ♦ The Token Network
    - ♦ The Constraint Network
    - ♦ Metric Resources
    - ♦ Common Debugging Scenarios
- Architecture
  - **♦** Overview
  - ♦ Propagation Services
  - ♦ Plan Database Services
  - **♦** Modeling Services
  - ♦ Problem Solving Services
  - ♦ Ancillary Modules
- How to Extend EUROPA

- ♦ Adding a Constraint
- ♦ Adding a Listener
  - ♦ TODO! Entries for different listener types
- ♦ Extending the built-in solver
  - ♦ Adding a Flaw Filter
  - ♦ Adding a Flaw Handler
  - ♦ Adding a Flaw Manager
- ♦ Building your own Solver
- API Docs (TODO: add link to Doxygen/JavaDoc docs)
  - ♦ PSEngine (C++ / Java)
  - ♦ Internal C++ API
- Glossary
- References

## **Modeling tricks**

• Notes on Using Resource Search Operators

<u>Images</u> (referenced throughout the documentation)

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